

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. to 39. (Cancelled)

40. (Presently amended) The compound of Claim 48 ~~Claim 39~~ wherein R¹ is hydrogen or methyl and R⁴ is hydrogen.

41. (Original) The compound of Claim 40 wherein "a" represents a double bond.

42. (Cancelled)

43. (Presently amended) The compound of Claim 49 ~~Claim 42~~ wherein R¹ is hydrogen or methyl and R⁴ is hydrogen.

44. (Original) The compound of Claim 43 wherein "a" represents a double bond.

45. (Presently amended) The compound of ~~Claim 35~~ selected from the group consisting of:

~~16 α -fluoro-17 β -hydroxy-4-methyl-4-aza-5 α -androst-1-en-3-one;~~

~~16 β -fluoro-17 α -hydroxy-4-methyl-4-aza-5 α -androst-1-en-3-one;~~

~~16 α -fluoro-17 β -hydroxy-4,17 α -dimethyl-4-aza-5 α -androst-1-en-3-one;~~

~~16 β -fluoro-17 β -hydroxy-4-methyl-4-aza-5 α -androst-1-en-3-one;~~

~~2 α -fluoro-17 β -hydroxy-4-methyl-4-aza-5 α -androstan-3-one;~~

~~2 β -fluoro-17 β -hydroxy-4-methyl-4-aza-5 α -androstan-3-one;~~

~~2,2-difluoro-17 β -hydroxy-4-methyl-4-aza-5 α -androstan-3-one;~~

~~17 β -hydroxy-2 α ,4-dimethyl-4-aza-5 α -androstan-3-one;~~

~~17 β -hydroxy-16 α -(methoxymethyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;~~

~~17 β -hydroxy-16 α -(ethoxymethyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;~~

~~17 β -hydroxy-16 α -(2-methoxyethyloxymethyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;~~

~~17 β -hydroxy-16 α -(ethyloxycarbonylmethyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;~~

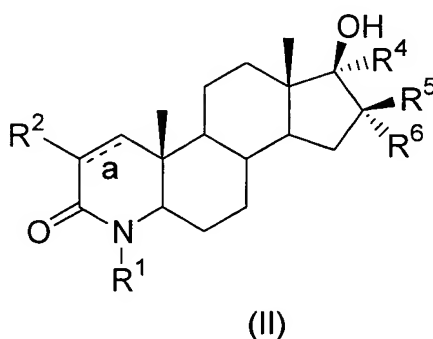
~~17 β -hydroxy-16 α -(carboxymethyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;~~
~~17 β -hydroxy-16 α -(2-hydroxyethyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;~~
~~17 β -hydroxy-16 α -allyl-4-methyl-4-aza-5 α -androst-1-en-3-one;~~
~~17 β -hydroxy-4,16 α ,17 α -trimethyl-4-aza-5 α -androst-1-en-3-one;~~
~~17 β -hydroxy-17 α -ethyl-4-methyl-4-aza-5 α -androstan-3-one;~~
17 β -hydroxy-16 α -(2-trifluoromethylbenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(3-trifluoromethylbenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(4-trifluoromethylbenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(2-fluorobenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(3-fluorobenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(4-fluorobenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(3-chlorobenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(4-chlorobenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(4-trifluoromethoxybenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(3-methoxybenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -benzyl-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(2-methylbenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 α -(2-naphthyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 β -(2-methylbenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 β -(3-methylbenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16 β -(4-chlorobenzyl)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(2-chlorobenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(3-fluorobenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(3-trifluoromethylbenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(2-trifluoromethylbenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(3-methoxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(3,4-methylenedioxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
~~17 β -hydroxy-16-(5-methoxy-3,4-methylenedioxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;~~
17 β -hydroxy-16-(3,5-difluorobenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(3,5-dichlorobenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(3,4-dimethoxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(pyridin-2-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(pyridin-4-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
~~17 β -hydroxy-16-(cyclopropylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;~~

17 β -hydroxy-16-(furan-2-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(1-methyl-imidazol-2-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
~~17 β -hydroxy-16-cyclohexylidene-4-methyl-4-aza-5 α -androst-1-en-3-one;~~
~~17 β -hydroxy-16-ethylidene-4-methyl-4-aza-5 α -androst-1-en-3-one;~~
~~17 β -hydroxy-16-isopropylidene-4-methyl-4-aza-5 α -androst-1-en-3-one;~~
~~17 β -hydroxy-16-isobutylidene-4-methyl-4-aza-5 α -androst-1-en-3-one;~~
17 β -hydroxy-16-(piperidin-4-ylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(N-t-butyloxycarbonylpiperidin-4-ylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(1,3-thiazol-2-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(benzofuran-2-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(5-hydroxymethyl-furan-2-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(1-methyl-pyrrol-2-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(pyrrol-2-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(2-ethoxy-pyrimidin-5-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(pyrimidin-5-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(2-methyl-pyrimidin-5-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(3-trifluoromethoxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(4-trifluoromethoxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(4-dimethylaminobenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(9-methoxy-quinolin-2-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(quinoxalin-6-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(quinoxalin-7-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(2-hydroxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(3-hydroxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(4-hydroxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(pyridin-3-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(N-methylpiperidin-4-ylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
17 β -hydroxy-16-(2-chloro-4-dimethylaminobenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;

17 β -hydroxy-16-(2-amino-pyridin-3-ylmethylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
 17 β -hydroxy-16-(3-carboxymethyl-benzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
 17 β -hydroxy-16-(3-carboxybenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
 17 β -hydroxy-16-(3-nitrobenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
 17 β -hydroxy-16-(4-nitrobenzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one; and
 17 β -hydroxy-16-(benzylidene)-4-methyl-4-aza-5 α -androst-1-en-3-one;
 or a pharmaceutically acceptable salt thereof.

46. (Presently amended) A composition comprising a compound of Claim 47 ~~Claim 35~~ and a pharmaceutically acceptable carrier.

47. (New) A compound of structural formula II:



or a pharmaceutically acceptable salt thereof wherein

“a” represents a single bond or a double bond;

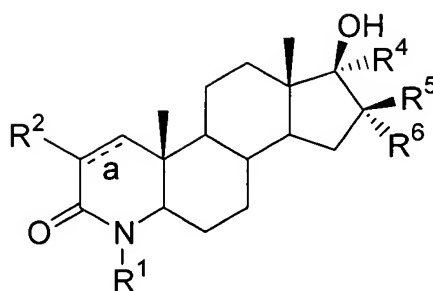
R¹ is hydrogen, hydroxymethyl, or C₁₋₃ alkyl, wherein alkyl is unsubstituted or substituted with one to seven fluorine atoms;

R² is hydrogen, fluorine, or C₁₋₄ alkyl when “a” represents a double bond; or two R² substituents are each independently hydrogen, fluorine, or C₁₋₄ alkyl when “a” represents a single bond;

R⁴ is hydrogen, C₁₋₄ alkyl, C₂₋₄ alkenyl, or C₂₋₄ alkynyl;

one of R⁵ and R⁶ is hydrogen and the other is arylmethyl, wherein aryl is selected from the group consisting of phenyl, naphthyl, pyridyl, furanyl, pyrrolyl, thiazolyl, imidazolyl, benzofuranyl, and 1,3-benzodioxolyl, wherein the aryl group is unsubstituted or substituted with one to two groups independently selected from halogen, C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano, trifluoromethyl, and trifluoromethoxy.

48. (New) A compound of structural formula II:



(II)

according to claim 47 wherein

“a” represents a single bond or a double bond;

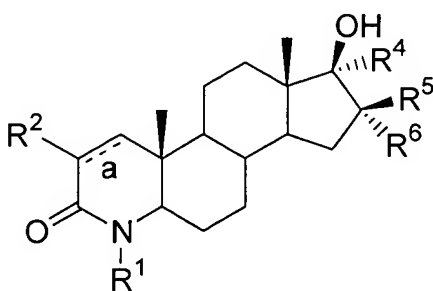
R¹ is hydrogen, hydroxymethyl, or C₁₋₃ alkyl, wherein alkyl is unsubstituted or substituted with one to seven fluorine atoms;

R² is hydrogen, fluorine, or C₁₋₄ alkyl when “a” represents a double bond; or two R² substituents are each independently hydrogen, fluorine, or C₁₋₄ alkyl when “a” represents a single bond;

R⁴ is hydrogen, C₁₋₄ alkyl, C₂₋₄ alkenyl, or C₂₋₄ alkynyl;

R⁵ is hydrogen and R⁶ is arylmethyl, wherein aryl is selected from the group consisting of phenyl, naphthyl, pyridyl, furanyl, pyrrolyl, thiazolyl, imidazolyl, benzofuranyl, and 1,3-benzodioxolyl, wherein the aryl group is unsubstituted or substituted with one to two groups independently selected from halogen, C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano, trifluoromethyl, and trifluoromethoxy.

49. (New) A compound of structural formula II:



(II)

or a pharmaceutically acceptable salt thereof wherein

wherein

“a” represents a single bond or a double bond;

R¹ is hydrogen, hydroxymethyl, or C₁₋₃ alkyl, wherein alkyl is unsubstituted or substituted with one to seven fluorine atoms;

R² is hydrogen, fluorine, or C₁₋₄ alkyl when "a" represents a double bond; or two R² substituents are each independently hydrogen, fluorine, or C₁₋₄ alkyl when "a" represents a single bond;

R⁴ is hydrogen, C₁₋₄ alkyl, C₂₋₄ alkenyl, or C₂₋₄ alkynyl;

R⁵ and R⁶ taken together are =CHaryl, wherein aryl arylmethyl, wherein aryl is selected from the group consisting of phenyl, naphthyl, pyridyl, furanyl, pyrrolyl, thiazolyl, imidazolyl, benzofuranyl, and 1,3-benzodioxolyl, wherein the aryl group is unsubstituted or substituted with one to two groups independently selected from halogen, C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano, trifluoromethyl, and trifluoromethoxy.

50. (New) A composition comprising a compound of Claim 48 and a pharmaceutically acceptable carrier.

51. (New) A composition comprising a compound of Claim 49 and a pharmaceutically acceptable carrier.